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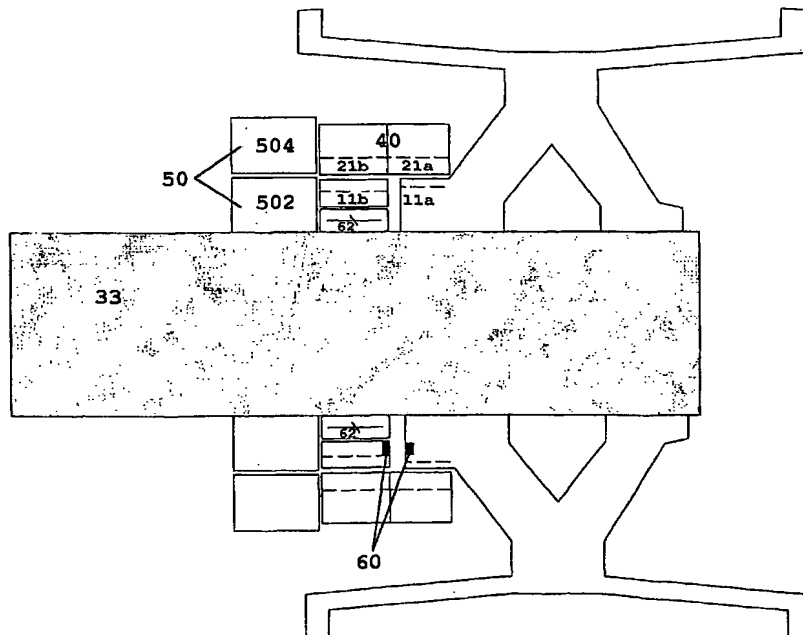
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[Continued on next page]

(54) Title: GEARED WHEEL MOTOR DESIGN



(57) Abstract: The present invention is a compound planetary gear system which has a moveable sun gear and a lockable sun gear to change the gear ratio between a high gear ratio and a pseudo 1:1 slipping ratio. The system makes use of a ratchet and pawl mechanism to provide a safety backup for when the lockable sun gear is locked. The invention may be used to move the aircraft from a stationary position., for taxiing, and for pre-rotating the wheels prior to landing.

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